



**TESTIMONY OF  
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ON COAST GUARD OPERATIONS IN THE ARCTIC  
BEFORE THE HOUSE TRANSPORTATION AND INFRASTRUCTURE  
SUBCOMMITTEE ON COAST GUARD AND MARITIME TRANSPORTATION**

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Good morning, Chairman LoBiondo, Ranking Member Larsen and distinguished Members of the Subcommittee. I am honored to have the opportunity to discuss the Coast Guard's Arctic operational presence, capabilities and emerging challenges in our role as the Nation's principal maritime safety, security, environmental protection and law enforcement entity.

**AN EVOLVING ARCTIC**

The United States is an Arctic Nation, and the Coast Guard has been operating in the Arctic Ocean since Alaska was a territory to assist scientific exploration, chart the waters, provide humanitarian assistance to native tribes, conduct search and rescue, and law enforcement. Today our mission remains remarkably similar to what it was in 1867; however, as open water continues to replace ice, human activity is increasing. With increasingly navigable waters, comes increased Coast Guard responsibility.

The Arctic domain has been gaining national attention. Gradually increasing accessibility to waters previously covered by ice has increased the significance of maritime issues including freedom of navigation, offshore resource exploration and exploitation, and environmental preservation. Observations and trends relevant to USCG operations include:

- *Offshore Resource Development:* The Arctic contains an estimated 22% of the world's technically recoverable oil and natural gas reserves. Shell is seeking approval to drill exploratory wells in the Chukchi and Beaufort Seas beginning in 2012. Other oil companies, including ConocoPhillips and Statoil, have also leased tracts on the Arctic outer continental shelf and announced their interest in exploratory drilling as early as 2013.
- *Fish Stock Migration:* The Bering Sea remains one of the world's richest biomasses. As the ice edge recedes and water temperatures change, there have been reports that fish stocks are moving northwest. The North Pacific Fishery Management Council is currently conducting a study to gather more reliable data on fish stock migrations. Preliminary information indicates there is a "cool pool" of water below the surface that is discouraging a further shift north. If fish stocks begin to migrate north, fisherman will follow, which could lead to increased foreign incursions into the U.S. Exclusive Economic Zone.
- *Dynamic Changes in Ice Conditions:* The recession of the ice edge continues to open new water in the summer months. While there is less ice and more water, the unpredictable movement of existing ice flows and uncharted waters beneath a previously frozen sea could present risks to ships that venture into these waters.

- *Persistent Challenging Environmental Conditions:* While much of the focus is on Arctic ice, ice is not the only threat. Normal weather conditions in Alaska and the Arctic would be considered heavy-weather conditions in most other maritime areas. Hurricane force winds, driving snows, winter darkness and high seas pose persistent challenges to both professional mariners and the increasing number of recreational mariners drawn to these waters. The massive hurricane-force storm last month once again reminded us that the Arctic remains a dangerous maritime environment where we must remain always ready to respond, regardless of the season.
- *Extended Continental Shelf:* This past summer marks the fourth year the U.S. Coast Guard Cutter (CGC) HEALY and the Canadian icebreaker LOUIS S. ST. LAURENT worked together to collect seismic and bathymetric data in the Arctic Ocean. This data is necessary to delineate the outer limits of the continental shelf beyond 200 nautical miles according to the criteria set forth in the Law of the Sea Convention.
- *Law of the Sea Treaty:* All other Arctic nations and most other nations worldwide have acceded to the Law of the Sea Treaty. The United States has not yet done so. Arctic nations are using the treaty's provisions in Article 76 to file extended continental shelf claims with the U.N. Commission on the Limits of the Continental Shelf (CLCS) in order to expand the territory over which they have exclusive rights to resources on and beneath the Arctic seabed. If the U.S. made an extended continental shelf claim, we could potentially assert sovereignty over 240 miles of additional seabed territory out to 440 miles from our land base line, far beyond the existing 200 nautical mile Exclusive Economic Zone. This area reportedly contains some of the richest, undiscovered deposits of oil and natural gas in the Arctic. However, until the U.S. accedes to the Law of the Sea Treaty, it is unlikely CLCS will entertain any U.S. submission of an extended continental shelf claim. Acceding to the Law of the Sea Treaty also provides us with standing to work within the Law of the Sea Convention framework with other Arctic Nations on issues such as environmental stewardship. As such, I join with a number of other senior Administration, military, industry, and academic leaders in supporting favorable action on the part of the U.S. Senate to accede to the Law of the Sea Treaty.

## **NATIONAL ARCTIC POLICY OBJECTIVES**

U.S. Arctic policy is set forth in the 2009 National Security Presidential Directive (NSPD) 66/Homeland Security Presidential Directive (HSPD) 25. The Arctic Region Policy directive identifies objectives for the Arctic while acknowledging the effects of climate change and increased human activity. Importantly for the Coast Guard, NSPD 66 specifically directs relevant agencies, including the Department of Homeland Security, to work with other nations and through the International Maritime Organization (IMO) to provide for safe and secure Maritime Transportation in the Arctic. NSPD-66 also directs the Secretaries of State, Defense, and Homeland Security, in coordination with heads of other relevant executive departments and agencies, to carry out the policy as it relates to national security and Arctic homeland security interests. Executive Order 13547 (Stewardship of the Ocean, Our Coasts, and the Great Lakes) adopts and directs Federal agencies to implement the recommendations of the Interagency Ocean Policy Task Force. These recommendations include, as one priority objective, identifying and implementing actions to address changing conditions in the Arctic through better stewardship. The Coast Guard is moving forward to execute its responsibilities under these directives.

## **COAST GUARD'S ROLE IN EXECUTING NATIONAL ARCTIC POLICY OBJECTIVES**

The Coast Guard is the Nation's principal maritime safety, security, environmental protection and law enforcement entity. We have the lead role in ensuring Arctic maritime safety, security, and stewardship. Arctic operations are not new to the Coast Guard. We have been operating in the Arctic Ocean since as early as 1867 when Alaska was just a territory. Then, as now, our mission is to assist scientific exploration, chart the waters, provide humanitarian assistance to native tribes, conduct search and rescue, and enforce U.S. laws and regulations.

To meet NSPD 66's and EO 13547's direction, the Coast Guard is working closely with its many inter-agency partners, and Alaska State, local and tribal governments, as well as with industry and academia. For the past four years, we have been conducting limited Arctic operations during open water periods. However, we face many challenges. Some Arctic operations demand specialized vessels, aircraft and crews trained to operate in extreme climates. Operationally, in order to meet the NSPD 66's and EO 13547's requirements, we need to determine our Nation's vessel requirements for transiting in ice-laden waters, consider establishing seasonal bases for air and boat operations, and develop a force structure that can operate in extreme cold and ice.

Given the scope of these challenges, we have adopted a "Whole of Government" approach and are leveraging international partnerships, such as the recent Search and Rescue agreement, to meet current mission requirements. The Coast Guard's strategic approach is to ensure we pursue the capability to perform our statutory missions so we can ensure the Arctic is safe, secure, and environmentally sustainable. This strategy is consistent with our Service's approach to performing its *Maritime Safety, Security and Stewardship* functions. In accordance with our risk reduction framework, we will do our part to build legal regimes, domain awareness, and a force structure that can operate in extreme cold and ice. Our approach also accounts for seasonal changes and conditions in the environment. While the Arctic is increasingly open in warmer months, its waters remain mostly ice-covered.

### **Meeting Homeland Security Needs in the Arctic**

As part of a multi-agency effort to implement the Arctic Region Policy, we continue to push forward and assess our Arctic operational limits. Since 2008, we set up small, temporary Forward Operating Locations on the North Slope in Prudhoe Bay, Nome, Barrow and Kotzebue to test our capabilities with boats, helicopters, and Maritime Safety and Security Teams. We also deployed our light-ice capable 225-foot ocean-going buoy tenders to test our equipment, train our crews and increase our awareness of activity. Additionally, each year from April to November we have flown two sorties a month to evaluate private, commercial and governmental activities. These initial missions have provided valuable information that we have used to develop our infrastructure and force structure requirements to make the transition from testing capabilities to conducting pulse operations this coming summer and beyond.

### **Protecting the Maritime Environment**

To protect the Arctic environment, we are engaging industry and the private sector to address their significant responsibilities for pollution prevention, preparedness and response capability. Recognizing that pollution response is significantly more difficult in cold, ice, and darkness, enhancing preventative measures is critical. Those engaging in offshore commercial activity in the Arctic must also plan and prepare for emergency response in the face of a harsh environment, long transit distances for air and surface assets and limited response resources. We continue to work to

facilitate awareness, contingency planning and communications. We are also actively participating in the Department of Interior led interagency working group on Coordination of Domestic Energy Development and Permitting in Alaska, (established by Executive Order 13580), to coordinate the efforts of Federal agencies responsible for overseeing the safe and responsible development of Alaska's onshore and offshore energy.

While prevention is critical, the Coast Guard must be able to respond to pollution incidents where responsible parties are not known or fail to adequately respond. In 2010, we deployed an emergency vessel towing system north of the Arctic Circle. We have also exercised the Vessel of Opportunity Skimming System (VOSS) and the Spilled Oil Recovery System (SORS) in Alaskan waters, but we have yet to conduct exercises north of the Arctic Circle. Both of these systems enable vessels to collect oil in the event of a discharge. The VOSS is deployable and capable of being used on a variety of ships. The SORS is permanently stored and deployed from the Coast Guard's 225-foot ocean-going buoy tenders. However, these systems have limited capacity and are only effective in ice-free conditions. We need to test and evaluate them in icy waters. Notably, the President's Fiscal Year 2012 Budget supports research and development work, including research on oil detection and recovery in icy water conditions.

Fisheries are also a major concern. The National Marine Fisheries Service, based on a recommendation from the North Pacific Fisheries Management Council, has imposed a moratorium on fishing within the U.S. exclusive economic zone north of the Bering Strait until an assessment of the practicality of sustained commercial fishing is completed. Regardless of the outcome of this assessment the Coast Guard will continue to carry out its mission to enforce and protect living marine resources in the high latitudes.

### **Facilitating Safe, Secure, and Reliable Navigation**

We continue to update our Waterways Analysis and Management System to determine navigational requirements, vessel traffic density and appropriate ship routing measures. We are also moving forward with a Bering Strait Port Access Route Study, which is a preliminary analysis to determine navigational, vessel traffic and other safety requirements. Because the Bering Strait is an international Strait, we require coordination with the Russian Federation and other stakeholders to develop the safest and most efficient waterway prior to forwarding the analysis to the IMO for consideration.

### **Supporting Multi-Agency Arctic Region Policy Implementation**

The Coast Guard continues to support international and multilateral organizations, studies, projects and initiatives. We are actively working with the Arctic Council, IMO and their respective working groups. We are heading the U.S. delegation to the Arctic Council Oil Spill Task Force that is developing an International Instrument on Arctic Marine Oil Pollution Preparedness and Response. We are also conducting joint contingency response exercises with Canada and we maintain communications and working relationships with Canadian and Russian agencies responsible for regional operations including Search and Rescue (SAR), law enforcement and oil spill response. We maintain bilateral response relationships with Canada and Russia, and last month we hosted representatives from the Russian State Marine Pollution Control Salvage and Rescue Administration (SMPCSRA) to sign an expanded Memorandum of Understanding and Joint Contingency Plan to foster closer cooperation in oil spill response. Additionally, Secretary of State Clinton recently signed an Arctic SAR agreement, which memorialized the intent of all Arctic nations to cooperate in

SAR operations. We will continue to engage Arctic nations, international organizations, industry, academia and Alaskan state, local and tribal governments to strengthen our partnerships and interoperability.

In particular, our engagement with Alaska Native Tribes continues to be highly beneficial. Our efforts to learn from their centuries of traditional knowledge—and their willingness to share it with us—have made our operations safer and more successful. This year, we again conducted small-scale visits to tribes in remote villages on the North Slope and along northwestern Alaska to conduct boating safety exchanges and provide medical, dental, and veterinary care. We are working hard to ensure tribal equities are recognized, considered and indigenous peoples and their way of life are protected to the greatest extent possible. We look forward to continuing to strengthen our partnerships with our Alaskan Native friends.

### **CURRENT ARCTIC CAPACITIES AND LIMITATIONS**

The U.S. Coast Guard's extensive history of Arctic service provides both experience and an expansive network of governmental, non-governmental and private partnerships to draw upon. However, while our summer operations continue to provide valuable lessons and help us gain insights regarding the Arctic, we must acknowledge the seasonal limitation of these efforts and the fact that we still have much to learn about Arctic operations. As new capabilities are developed, the Coast Guard will work to ensure its force structure is appropriately sized, trained, equipped and postured to meet its Arctic mission requirements.

The Coast Guard's most immediate operational requirement is infrastructure. Energy exploration is underway on the North Slope of Alaska, but the existing infrastructure is extremely limited. We need a seasonal facility to base our crews, hangar our aircraft and protect our vessels in order to mount a response.

We also need to take stock of our current assets that are capable of year-round Arctic operations. Currently, there are few national assets capable of doing so. The Coast Guard has one operational ice breaker, the 11 year old Coast Guard Cutter HEALY, a medium icebreaker built with specialized scientific research capabilities.

Cutter HEALY is currently underway in the Arctic, completing the last of four missions for Calendar Year 2011. Currently, scientists from the Woods Hole Oceanographic Institute are aboard collecting micro organism samples to evaluate biomass health, migration patterns and general analysis of the ocean's food chain. Previous missions this year have supported research by the National Aeronautics and Space Administration (NASA), Naval Research Lab, National Science Foundation, Office of Naval Research and the Department of State. As mentioned previously, HEALY also conducted joint operations with the Canadian Coast Guard Icebreaker LOUIS S. ST. LAURANT collecting seismic and bathymetric data to map the Arctic seafloor in anticipation of an Extended Continental Shelf submission in accordance with the Law of the Sea Convention.

However, our two heavy polar ice breakers are not operational. The 34-year-old POLAR SEA is now in the process of being decommissioned due to a major engineering casualty and is reaching its' end of service life. The 35-year-old POLAR STAR, which has been in a caretaker status since 2006, is currently undergoing a major reactivation project, funded by 2009 and 2010 appropriations, and is expected to be ready for operations in 2013.

Surface capability is vital to meet our responsibilities in the region. Although the risk of an incident in ice-covered U.S. waters is currently low, our Nation must plan for ice capable assets in the future that can effectively carry out year-round search and rescue, environmental response and other Arctic operations. In the near term, the Coast Guard can utilize the HEALY, and starting in 2013, POLAR STAR, to manage the response or rely on our foreign Arctic partners that have icebreakers operating in the area.

## **CONCLUSION**

With an emerging Arctic Ocean come increased national operational responsibilities. National Security Presidential Directive (NSPD) 66/Homeland Security Presidential Directive (HSPD) 25 and Executive Order 13547 direct the Coast Guard to develop mission objectives. We also must meet our ongoing statutory responsibilities. To meet these objectives and responsibilities, we have much work to do.

We must build toward a level of mission performance and preparedness commensurate with the relative risks posed by Arctic activity; we must continue working amongst the interagency to refine future mission requirements, identify the precise mix of national assets, capabilities and infrastructure needed to meet these requirements and look for collocation opportunities. We must continue to seek out opportunities with our Arctic neighbors and the global community to address the critical issues of governance, sovereignty, environmental protection and international security.

While there are many challenges, the increasingly open Arctic Ocean also presents unique opportunities. The relatively undeveloped infrastructure, current low commercial maritime activity levels and developing governance structure provide an opening to engage in proactive, integrated, coordinated and sustainable U.S. and international initiatives. We look forward to working with the Congress on how our Coast Guard can continue to support our national Arctic objectives, protect its fragile environment and remain Semper Paratus – Always Ready in this new ocean.

Thank you for the opportunity to testify today. I look forward to your questions.